Journal of Accountancy

Volume 53 | Issue 3 Article 5

3-1932

# Students' Department

H. P. Baumann

# Students' Department

H. P. Baumann, *Editor*

## AMERICAN INSTITUTE EXAMINATIONS

[Note.—The fact that these solutions appear in The Journal of Accountancy should not cause the reader to assume that they are the official solutions of the board of examiners. They represent merely the opinions of the editor of the *Students' Department*.]

### Examination in Accounting Theory and Practice—Part II

November 13, 1931, 1:30 P. M. to 6:30 P. M.

*The candidate must answer all the following questions:*

No. 1 (40 points):

You are engaged to examine the record of capital stock, sold and issued, of the Natural Gas Company, from date of incorporation to March 31, 1931, and to make a detailed audit of the books of account during the period of production—January 1 to March 31, 1931.

The company was incorporated January 2, 1928, with an authorized capital of 500,000 shares of the par value of $1.00 each.

Your perusal of the minute book discloses that, pursuant to the provisions of the statutes of the state in which the company was incorporated, the entire capital stock of the company had been issued to P. Smith, in payment for gas leases, oil leases and contracts obtained from landowners at a fixed annual rental, until production of gas, when the rental would be converted to a royalty of 12½ per cent. of the gross value of the gas sold.

It was further disclosed that, under a pre-incorporation agreement, the promoters had sold and collected the proceeds of 205,000 shares of stock at 20 cents a share, which they accounted for as follows:

| | | |
|---|---|---|
| Proceeds: | | |
| From pre-incorporation subscriptions, 205,000 shares at 20 cents a share | | $41,000 |
| Disposition: | | |
| Gas wells—producing | $22,000 | |
| Gas wells—abandoned | 11,000 | |
| Leases expired | 451 | |
| Leases unexpired | 644 | |
| Supervision | 1,581 | |
| Cash in bank | 5,324 | |
| | | $41,000 |

You notice that certain items only are entered on the books of the company and credited, in total, to leases and contracts, viz.:

| | |
|---|---|
| Gas wells—producing | $22,000 |
| Leases unexpired | 644 |
| Cash (by cheque) | 5,324 |
| | $27,968 |

This record, together with a cheque payable to the company for the amount of the balance in bank and a legal transfer of all rights, titles and interest secured through these funds, was accepted and approved by the board of directors, which ordered that the record and transfers be given proper entry on the books of the company.

In order to raise funds for development of the gas structure, on which the company now holds the leases, Smith offered to donate to the treasury of the company 100,000 shares of stock for resale. The offer was accepted, approved and ratified by the board of directors, which fixed the resale price at $1.00 a share. A further offer of Smith to transfer 200,000 shares from his personal holdings for issuance to pre-incorporation subscribers was also accepted and approved, it being understood that any additional stock obligations to pre-incorporation subscribers would be supplied from the treasury of the company.

The treasurer (a man of means) deposited all receipts from the sale of stock in his personal bank account, relying upon the company's bookkeeper for the proper record of transactions. In checking this record you find the treasury-stock account credited with a remittance to cover 5,000 shares of stock donated by Smith, from his personal holdings, to the treasury of the company for transfer to A. Jones, in payment for pre-incorporation assistance to him, and another remittance of 100 shares, issued to replace a lost certificate. You note, also, that the bookkeeper had failed to obtain remittance for 1,250 shares that had been sold and issued. It was further disclosed that the treasurer had, personally, purchased 1,000 shares from a dissatisfied holder of capital stock, the certificate for which was found surrendered and attached to its relative stub without further transfer. Calling attention of the officers to these irregularities, you are requested to make the necessary corrections.

A trial balance, taken from the books, March 31, 1931, was as follows:

| | | |
|---|---|---|
| Abstracts of title | $ 670 | |
| Accounts payable | | $ 26,439 |
| Accounts receivable | 1,967 | |
| Automobile | 400 | |
| Auto, expense | 194 | |
| Camp buildings | 720 | |
| Capital stock authorized | | 500,000 |
| Cash in bank | 182 | |
| Casing, pipe, etc., in stores | 10,624 | |
| Development costs | 112,364 | |
| Equipment and pipe in place | 60,000 | |
| Incorporation costs | 674 | |
| Interest paid | 718 | |
| Land | 4,600 | |
| Land contracts | | 2,700 |
| Leases and contracts | 472,032 | |
| Lease rentals | 431 | |
| Notes payable | | 33,947 |
| Revenue from gas wells | | 6,114 |
| Royalties paid (12½%) | 764 | |
| Salary of manager | 900 | |
| Sundry expenses | 454 | |
| Surplus donated | | 100,000 |
| Taxes paid (property) | 37 | |
| Traveling | 605 | |
| Treasury stock | 864 | |
| | $669,200 | $669,200 |

The company has decided to capitalize all development costs and to compute depletion on the basis of 27½ per cent. of gross income and depreciation on the productive life of ten years, without salvage value, in the case of camp buildings and equipment and four years on that of the automobile.

Make the necessary adjustments to bring the accounts in accord with the facts presented. Prepare profit-and-loss account for the three months' period —January 1 to March 31, 1931, and balance-sheet as of March 31, 1931.

Is the rate of depletion determined fully deductible for income-tax purposes?

*Solution:*

The entries necessary to correctly state the authorized capital stock, the donation of the 300,000 shares by Mr. Smith, and the accounting for the $41,000 collected by the promoters, should appear somewhat as follows:

(1)

| | | |
|---|---|---|
| Leases and contracts | $500,000 | |
| Capital stock—authorized | | $500,000 |
| To record the authorized capital stock of 500,000 shares of a par value of $1 a share. | | |

(2)

| | | |
|---|---|---|
| Treasury stock | 100,000 | |
| Donated surplus | | 100,000 |
| To record 100,000 shares of capital stock to be sold for $1 each which shares were donated by Mr. Smith for the purpose of raising funds for the development of the gas structure. | | |

From the trial balance it may be assumed that entries numbers 1 and 2 were made on the books.

(3)

| | | |
|---|---|---|
| Treasury stock | 200,000 | |
| Donated surplus | | 200,000 |
| To record the acceptance of the further offer of Mr. Smith of 200,000 shares of stock for issuance to pre-incorporation subscribers. | | |

(4)

| | | |
|---|---|---|
| Cash | 41,000 | |
| Donated surplus (discount on treasury stock) | 164,000 | |
| Treasury stock | | 205,000 |
| To record the sale of 205,000 shares of treasury stock at $.20 a share. | | |

(5)

| | | |
|---|---|---|
| Gas wells—producing | 22,000 | |
| Gas wells—abandoned | 11,000 | |
| Leases expired | 451 | |
| Leases unexpired | 644 | |
| Supervision | 1,581 | |
| Cash | | 35,676 |
| To record the payments of cash by promoters. | | |

However, the problem states that only certain of these items accounted for by the promoters were recorded on the books. While the candidate is told that the credit was made to leases and contracts, he must assume that the cost of the producing gas wells ($22,000) and the unexpired leases ($644) was charged to some such account as development costs. The abandoned gas wells, leases expired, etc., are to be capitalized with the other development costs.

(6)

| | | |
|---|---|---|
| Leases and contracts | $27,968 | |
| Gas wells—producing | | $22,000 |
| Leases unexpired | | 644 |
| Cash | | 5,324 |

To reverse the entry made on the books crediting leases and contracts.

(7)

| | | |
|---|---|---|
| Development costs | 13,032 | |
| Gas wells—abandoned | | 11,000 |
| Leases expired | | 451 |
| Supervision | | 1,581 |

To charge development costs with the pre-incorporation costs of gas wells, leases and supervision.

(8)

| | | |
|---|---|---|
| Treasury stock | 5,000 | |
| Donated surplus | | 5,000 |

To record the receipt of an additional 5,000 shares of stock donated by Mr. Smith, which stock was issued to A. Jones in payment for pre-incorporation services.

(9)

| | | |
|---|---|---|
| Treasury stock | 100 | |
| Development costs | | 100 |

To reverse the entry made by the company's bookkeeper who credited treasury stock account, and presumably charged development costs when a new certificate was issued in place of the certificate for 100 shares which was lost.

(10)

| | | |
|---|---|---|
| Subscriptions to capital stock | 1,250 | |
| Development costs | | 1,250 |

To record the subscription for 1,250 shares of capital stock which were issued but for which payment was not received.

As the problem is not very definite on the point, it may be reasonably assumed that the bookkeeper originally recorded the issuance of these 1,250 shares by charging accounts receivable, or some other account, and crediting treasury stock account. As the account charged is not known, the above entry is based upon the assumption that the account, development costs, was the catch-all in this case.

No entry is necessary to record the purchase of 1,000 shares of the capital stock of the company by the treasurer for his personal account. A certificate for these 1,000 shares should be issued to him in lieu of the 1,000 shares which he had purchased from the dissatisfied holder, and which had been surrendered and attached to its relative stub in the stock certificate book. After this certificate has been issued, the bookkeeper should be requested to prepare a list showing the outstanding certificates with the number of shares so shown to be outstanding, separating the treasury stock. The amount of shares shown to be outstanding, and held in the treasury, should then be compared with the respective controlling accounts.

(11)

| | | |
|---|---|---|
| Depletion | $1,681.35 | |
| Reserve for depletion | | $1,681.35 |

To write off depletion for the period on the basis of 27½% of gross income of $6,114.

Regulations 74, article 241—"Under section 114 (b) (3), in the case of oil and gas wells, a taxpayer may deduct for depletion an amount equal to 27½ per cent. of the gross income from the property during the taxable year, but such deduction shall not exceed 50 per cent. of the net income of the taxpayer (computed without allowance for depletion) from the property." The profit-and-loss statement for the three months period ended March 31, 1931, shows a net loss of $782.35 after the charge for depletion of $1,681.35. Before depletion, the operations would show ($1,681.35 minus $782.35) a profit of $899.00. The limitation on the depletion charge would be, therefore, 50 per cent. of $899.00 or $449.50, if the operations for this particular period of three months were considered as being for a taxable year.

(12)

| | | |
|---|---|---|
| Depreciation—camp buildings | $ 18 | |
| Depreciation—equipment | 1,500 | |
| Depreciation—automobiles | 25 | |
| Reserve for depreciation—camp buildings | | $ 18 |
| Reserve for depreciation—equipment | | 1,500 |
| Reserve for depreciation—automobiles | | 25 |

To record the depreciation for the period January 1, 1931, to March 31, 1931, as follows:

| Asset | Cost | Annual rate | Depreciation |
|---|---|---|---|
| Camp buildings | $ 720 | 10% | $ 18 |
| Equipment | 60,000 | 10% | 1,500 |
| Automobiles | 400 | 25% | 25 |

(13)

| | | |
|---|---|---|
| Development costs | 1,101 | |
| Abstracts of title | | 670 |
| Lease rentals | | 431 |

To transfer the abstracts of title and fixed lease rentals to development costs.

NATURAL GAS COMPANY

Statement of profit and loss for the period January 1, 1931, to March 31, 1931

| | | | |
|---|---|---|---|
| Revenue from gas wells | | | $6,114.00 |
| Expenses: | | | |
| Automobile | | $ 194.00 | |
| Royalties paid (12½%) | | 764.00 | |
| Salary of manager | | 900.00 | |
| Sundry expense | | 454.00 | |
| Taxes paid (property) | | 37.00 | |
| Traveling | | 605.00 | |
| Depletion | | 1,681.35 | |
| Depreciation: | | | |
| Camp buildings | $ 18.00 | | |
| Equipment | 1,500.00 | | |
| Automobiles | 25.00 | | |
| | | 1,543.00 | |
| Interest paid | | 718.00 | 6,896.35 |
| Net loss for the period | | | $ 782.35 |

NATURAL GAS COMPANY

Balance-sheet—March 31, 1931

*Assets*

| | |
|---|---|
| Cash in bank | $ 182.00 |
| Accounts receivable | 1,967.00 |
| Subscriptions receivable | 1,250.00 |
| Casing, pipe, etc., in stores | 10,624.00 |

Fixed assets:

| Kind | Cost | Reserve for depreciation | Carrying value | |
|---|---|---|---|---|
| Land | $ 4,600.00 | $ | $ 4,600.00 | |
| Automobile | 400.00 | 25.00 | 375.00 | |
| Camp buildings | 720.00 | 18.00 | 702.00 | |
| Equipment and pipe in place | 60,000.00 | 1,500.00 | 58,500.00 | |
| Totals | $65,720.00 | $1,543.00 | $ 64,177.00 | 64,177.00 |

| | | |
|---|---|---|
| Leases, contracts and development costs: | | |
| Leases and contracts | $500,000.00 | |
| Development costs | 125,147.00 | |
| Total | $625,147.00 | |
| *Less*—reserve for depletion | 1,681.35 | |
| | | 623,465.65 |
| Incorporation costs | | 674.00 |
| | | $702,339.65 |

NATURAL GAS COMPANY

Working papers for the period January 1, 1931, to March 31, 1931

| | Trial balance March 31, 1931 | | Adjustments | | Profit and loss | | Balance-sheet | |
|---|---|---|---|---|---|---|---|---|
| | | | Debit | Credit | Debit | Credit | Debit | Credit |
| Abstracts of title | $ 670.00 | | | (13) $ 670.00 | | | | |
| Accounts payable | | $ 26,439.00 | | | | | | $ 26,439.00 |
| Accounts receivable | 1,967.00 | | | | | | $ 1,967.00 | |
| Automobile | 400.00 | | | | | | 400.00 | |
| Auto, expense | 194.00 | | | | $ 194.00 | | | |
| Camp buildings | 720.00 | | | | | | 720.00 | |
| Capital stock authorized | | 500,000.00 | | | | | | 500,000.00 |
| Cash in bank | 182.00 | | (4) $41,000.00 | (5) 35,676.00 | | | 182.00 | |
| | | | | (6) 5,324.00 | | | | |
| Casing, pipe, etc., in stores | 10,624.00 | | | | | | 10,624.00 | |
| Development costs | 112,364.00 | | (7) 13,032.00 | (9) 100.00 | | | 125,147.00 | |
| | | | (13) 1,101.00 | (10) 1,250.00 | | | | |
| Equipment and pipe in place | 60,000.00 | | | | | | 60,000.00 | |
| Incorporation costs | 674.00 | | | | | | 674.00 | |
| Interest paid | 718.00 | | | | 718.00 | | | |
| Land | 4,600.00 | | | | | | 4,600.00 | |
| Land contracts | | 2,700.00 | | | | | | 2,700.00 |
| Leases and contracts | 472,032.00 | | (6) 27,968.00 | | | | 500,000.00 | |
| Lease rentals | 431.00 | | | (13) 431.00 | | | | |
| Notes payable | | 33,947.00 | | | | | | 33,947.00 |
| Revenue from gas wells | | 6,114.00 | | | | $6,114.00 | | |
| Royalties paid (12½%) | 764.00 | | | | 764.00 | | | |
| Salary of manager | 900.00 | | | | 900.00 | | | |
| Sundry expenses | 454.00 | | | | 454.00 | | | |
| Surplus donated | | 100,000.00 | (4) 164,000.00 | (3) 200,000.00 | | | | 141,000.00 |
| | | | | (5) 5,000.00 | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Taxes paid (property) | 37.00 | | | | | | 37.00 | | | |
| Traveling | 605.00 | | | | | | 605.00 | | | |
| Treasury stock | 864.00 | | (3) | 200,000.00 | (4) | 205,000.00 | | | 964.00 | |
| | | | (8) | 5,000.00 | | | | | | |
| | | | (9) | 100.00 | | | | | | |
| Gas wells—producing | | | (5) | 22,000.00 | (6) | 22,000.00 | | | | |
| Gas wells—abandoned | | | (5) | 11,000.00 | (7) | 11,000.00 | | | | |
| Leases expired | | | (5) | 451.00 | (7) | 451.00 | | | | |
| Leases unexpired | | | (5) | 644.00 | (6) | 644.00 | | | | |
| Supervision | | | (5) | 1,581.00 | (7) | 1,581.00 | | | | |
| Subscriptions to capital stock | | | (10) | 1,250.00 | | | | | 1,250.00 | |
| Depletion | | | (11) | 1,681.35 | | | 1,681.35 | | | |
| Reserve for depletion | | | | | (11) | 1,681.35 | | | | 1,681.35 |
| Depreciation—camp buildings | | | (12) | 18.00 | | | 18.00 | | | |
| Depreciation—equipment | | | (12) | 1,500.00 | | | 1,500.00 | | | |
| Depreciation—automobile | | | (12) | 25.00 | | | 25.00 | | | |
| Reserve for depreciation—camp buildings | | | | | (12) | 18.00 | | | | 18.00 |
| Reserve for depreciation—equipment | | | | | (12) | 1,500.00 | | | | 1,500.00 |
| Reserve for depreciation—automobile | | | | | (12) | 25.00 | | | | 25.00 |
| Profit and loss | | | | | | | | 782.35 | 782.35 | |
| | $669,200.00 | $669,200.00 | | $492,351.35 | | $492,351.35 | $6,896.35 | $6,896.35 | $707,310.35 | $707,310.35 |

*Liabilities and net worth*

| | | | |
|---|---|---|---|
| Liabilities: | | | |
| Accounts payable | | $ 26,439.00 | |
| Notes payable | | 33,947.00 | |
| Land contracts | | 2,700.00 | |
| | | | $ 63,086.00 |
| Net worth: | | | |
| Capital stock | $500,000.00 | | |
| *Less*—treasury stock | 964.00 | $499,036.00 | |
| Donated surplus | | 141,000.00 | |
| Total | | $640,036.00 | |
| *Less*—deficit from operations | | 782.35 | 639,253.65 |
| | | | $702,339.65 |

No. 2 (12 points):

Abel, Budd, Catt and Dunn were partners in a stock-exchange brokerage house. During the year 1929, through speculation, the capital of the firm was reduced to such an extent that it became necessary to seek financial aid. They succeeded in introducing a capitalist, by name Ezee, to become a partner and to invest, as such, $500,000 in cash.

By the terms of the new partnership agreement, interest was to be allowed on capital at the rate of 6 per cent. per annum, and the average sales value of the seats on the exchanges held by the partners, plus cash, was to determine the values of their interests for capital purposes.

It was expressly stipulated that interest on the capital of the four partners—Abel, Budd, Catt and Dunn—should not be credited to them unless earned, but that the interest on Ezee's cash capital of $500,000 should be paid to him in any circumstances.

Profits were to be divided on the following bases:

| | |
|---|---|
| Abel | 30 per cent. |
| Budd | 25 " " |
| Catt | 15 " " |
| Dunn | 10 " " |
| Ezee | 20 " " |

The capital accounts as at December 31, 1930, were as follows:

| | Average sales value of exchange seats | Cash |
|---|---|---|
| Abel | $500,000 | $120,000 |
| Budd | 300,000 | 100,000 |
| Catt | 180,000 | 30,000 |
| Dunn | 80,000 | 45,000 |
| Ezee | | 500,000 |

The firm sustained a loss of $240,000, during the year 1930, before any distribution of interest on capital had been made.

How should this loss be apportioned?

Submit working papers showing how you reach your conclusions.

*Solution:*

Under the express stipulation of the partnership agreement, interest at the rate of 6 per cent. on his investment of $500,000, or $30,000, must be allowed to

ABEL, BUDD, CATT, DUNN, AND EZEE

Statement of partners' capital accounts for the year ended December, 31, 1930

| | Abel | Budd | Catt | Dunn | Ezee | Together |
|---|---|---|---|---|---|---|
| Average sales value of exchange seats | $500,000 | $300,000 | $180,000 | $ 80,000 | $ | $1,060,000 |
| Cash | 120,000 | 100,000 | 30,000 | 45,000 | 500,000 | 795,000 |
| Totals, before interest and loss | $620,000 | $400,000 | $210,000 | $125,000 | $500,000 | $1,855,000 |
| *Add*—interest on capital account at 6% per annum | | | | | 30,000 | 30,000 |
| Totals before loss | $620,000 | $400,000 | $210,000 | $125,000 | $530,000 | $1,885,000 |
| Deduct share of loss | 81,000 | 67,500 | 40,500 | 27,000 | 54,000 | 270,000 |
| Balance, December 31, 1930 | $539,000 | $332,500 | $169,500 | $ 98,000 | $476,000 | $1,615,000 |

Ezee. No interest is to be credited to the remaining partners "unless earned." The loss of $240,000 should be increased by the amount of interest, $30,000, allowable to Ezee, which loss should be distributed in the profit-and-loss sharing ratio as follows:

| Partners | Profit and loss ratio | Share of loss |
|---|---|---|
| Abel | 30% | $ 81,000 |
| Bud | 25 | 67,500 |
| Catt | 15 | 40,500 |
| Dunn | 10 | 27,000 |
| Ezee | 20 | 54,000 |
| Total | 100% | $270,000 |

A statement of the partners' capital accounts appears on the preceeding page.